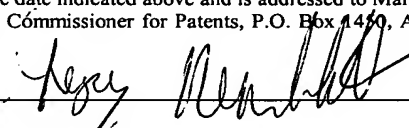


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Caron, Ronald N.
Robinson, Peter W.
Tyler, Derek E.
Bogel, Andreas
Kuhn, Hans-Achim
Seeger, Joerg

Docket: 102350-200

Serial No.: 10/657,005 Art Unit: Not yet received
Filed: September 5, 2003 Examiner: Not yet received
Assignee: Olin Corporation/Wieland-Werke AG
Title: AGE-HARDENING COPPER-BASE ALLOY AND PROCESSING

Certificate of Mailing	
Date of Deposit October 15, 2003.	
I hereby certify under 37 CFR 1.8(a) that this correspondence (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated above and is addressed to Mail Stop Non-Fee Amendments Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.	
Signed:	
Name: Gregory S. Rosenblatt	

INFORMATION DISCLOSURE STATEMENT TRANSMITTAL LETTER

Mail Stop Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, please find enclosed an Information Disclosure Statement, Form PTO-1449 and one copy of each cited reference. The references either disclose copper/titanium alloys or are owned by one of the applicants. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

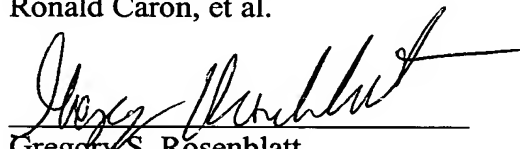
- ☒ 1. This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.
- ☐ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.
- ☐ a. Each item of information contained on Form PTO-1449 filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. §1.97(e)(1); and no fee is required under 37 C.F.R. §1.17(p).
- ☐ b. No item of information cited on Form PTO-1449 filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. §1.97(e)(2); and no fee is required under 37 C.F.R. §1.17(p).
- ☐ Please charge Deposit Account No. 23-1665 in the amount of \$180.00 in payment of the fee under 37 C.F.R. §1.17(p). Two additional copies of this Information Disclosure Statement are enclosed.
- ☐ A check in the amount of \$180.00 is attached hereto in payment of the fee under 37 C.F.R. §1.17(p).
- ☐ 3. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. It is hereby requested that the Information Disclosure Statement be considered.

- ☐ a. Each item of information contained on Form PTO-1449 filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. §1.97(e)(1).
- ☐ b. No item of information cited on Form PTO-1449 filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. §1.97(e)(2).
- ☐ Please charge Deposit Account No. 23-1665 in the amount of \$130.00 in payment of the fee under 37 C.F.R. §1.17(i)(1). Two additional copies of this Information Disclosure Statement are enclosed.
- ☐ A check in the amount of \$130.00 is attached hereto in payment of the fee under 37 C.F.R. §1.17(i)(1).

The undersigned represents that the closest art of which he is presently aware has been cited herein and understands that this statement shall not be construed as a representation that no better art exists or that a thorough patentability search has been made.

The undersigned further represents that the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

Respectfully submitted,
Ronald Caron, et al.



Gregory S. Rosenblatt
Reg. No. 32,489

Date: October 15, 2003
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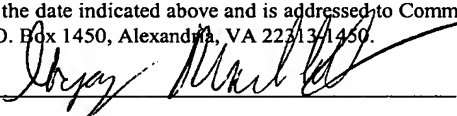
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Caron, Ronald N. Docket: 102350-200
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Signed:	
Name: Gregory S. Rosenblatt	

INFORMATION DISCLOSURE STATEMENT

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Dear Sir:

In keeping with the duty of candor and good faith owed to the Patent and Trademark Office, Applicant wishes to make of record the items on attached PTO Form. Copies of the items are provided in accordance with 37 CFR 1.98.

Patents issued to Assignee (Olin Corporation or Wieland-Werke AG) or its subsidiaries:

1. U.S. Patent No. 4,601,879, issued July 22, 1986, assigned to Wieland-Werke AG.
Inventors: Wolfgang Durrschnabel, Heinrich Stiier, Jorg Steeb, and Franz J. Puckert.
2. U.S. Patent No. 5,306,465, issued April 26, 1994, assigned to Olin Corporation.
Inventors: Ronald N. Caron, and John F. Breedis.
3. U.S. Patent No. 5,370,840, issued December 6, 1994, assigned to Olin Corporation.
Inventors: Ronald N. Caron, and John F. Breedis.
4. U.S. Patent No. 5,486,244, issued January 23, 1996, assigned to Olin Corporation.
Inventors: Ronald N. Caron, and John F. Breedis.
5. U.S. Patent No. 5,565,045, issued October 15, 1996, assigned to Olin Corporation.
Inventors: Ronald N. Caron, and John F. Breedis.
6. U.S. Patent No. 5,601,665, issued February 11, 1997, assigned to Olin Corporation.
Inventors: Ronald N. Caron, and John F. Breedis.
7. U.S. Patent No. 5,681,662, issued October 28, 1997, assigned to Olin Corporation.
Inventors: Szuchain Chen, Ronald N. Caron, James A. Scheuneman, Harvey P. Cheskis, and Richard J. Slusar.
8. U.S. Patent No. 5,766,377, issued June 16, 1998, assigned to Wieland-Werke AG.
Inventors: Gert Mueller, Harald Siegle, and Michael Bohsmann.
9. U.S. Patent No. 5,820,701, issued October 13, 1998, assigned to Waterbury Rolling Mills. Inventor: Ashok K. Bhargava.
10. U.S. Patent No. 5,853,505, issued December 29, 1998, assigned to Olin

Corporation. Inventors: Dennis R. Brauer, John F. Breedis, Ronald N. Caron, and Carl Deppisch.

- 11.. U.S. Patent No. 5,865,910, issued February 2, 1999, assigned to Waterbury Rolling Mills. Inventor: Ashok K. Bhargava.
12. U.S. Patent No. 5,882,442, issued March 6, 1999, assigned to Olin Corporation. Inventors: Ronald N. Carn, John F. Breedis, Gary W. Watson, William Brenneman, Richard P. Vierod, Dennis R. Brauer, and Derek E. Tyler.
13. U.S. Patent No. 5,893,953, issued April 13, 1999, assigned to Waterbury Rolling Mills. Inventor: Ashok K. Bhargava.
14. U.S. Patent No. 5,916,386, issued June 29, 1999, assigned to Waterbury Rolling Mills. Inventor: Ashok K. Bhargava.
15. U.S. Patent No. 5,985,055, issued November 16, 1999, assigned to Waterbury Rolling Mills. Inventors: Ashok K. Bhargava.
16. U.S. Patent No. 6,136,103, issued October 24, 2000, assigned to Wieland-Werke AG. Inventors: Andreas Boegel, Stephan Hansmann, Uwe Hofmann, Hilmar R. Mueller, and Joachim Riedle.
17. Patent Number DE4314625, published March 17, 1994, assigned to Wieland-Werke AG. Inventor: Hans-Aschim Kuhn.
18. Japan Patent No. 2001-040440, published February 13, 2001, assigned to Wieland-Werke AG. Inventors: Andreas Boegel, and Uwe Hofmann.
19. European Patent No. EP1061146, published December 20, 2000, assigned to Wieland-Werke AG. Inventors: Andreas Boegel, and Uwe Hofmann.

Patents Pertaining to Relevant Art; Not Issued to Olin Corporation or subsidiaries:

1. U.S. Patent No. 1,991,162, issued February 12, 1935, assigned to Metal & Thermit Corporation. Inventor: Wilhelm Kroll.
2. U.S. Patent No. 3,201,234, issued August 17, 1965, assigned to The Beryllium Corporation. Inventors: Paul Joseph Scherbner and Robert Eugene Saxtan.
3. U.S. Patent No. 4,362,579, issued December 7, 1982, assigned to Nihon Kogyo Kabushiki Kaisha. Inventor: Masahiro Tsuji.
4. U.S. Patent No. 4,599,119, issued July 8, 1986, assigned to NGK Insulators, Ltd. Inventors: Kazuo Ikushima, and Toshiaki Ishihara.
5. U.S. Patent No. 4,606,889, issued August 19, 1986, assigned to Cobot Corporation. Inventors: Sherwood Goldstein, and Paul J. Scherbner.
6. U.S. Patent No. 4,612,167, issued September 16, 1986, assigned to Hitachi Metals, Ltd. Inventors: Rikizo Watanabe, and Daizi Sakamoto.
7. U.S. Patent No. 4,620,885, issued November 4, 1986, assigned to Nakasato Limited and Naohiro. Inventors: Naohiro Igata, and Shinji Sato.
8. U.S. Patent No. 4,678,720, issued July 7, 1987, assigned to GTE Laboratories Inc. Inventors: Shih C. Hsu, and Ramas V. Raman.
9. U.S. Patent No. 4,780,275, issued October 25, 1988, assigned to William Prym-Werke GmbH & Co. KG. Inventors: Horst Grefkes, Alex Troost, Okan Akin, and Michael Prym.
10. U.S. Patent No. 5,069,270, issued December 3, 1991, assigned to KM-Kabel Metall

AG. Inventor: Horst Gravemann.

11. U.S. Patent No. 5,215,711, issued June 1, 1993, assigned to Tsuneaki Mikawa.
Inventor: Tsuneaki Mikawa.
12. U.S. Patent No. 5,338,374, issued August 16, 1994, assigned to The United States of America. Inventors: Harris Mrcus, Zwy Eliezer, and Morris E. Fine.
13. U.S. Patent No. 5,968,604, issued October 19, 1999, assigned to Euroflamm, GmbH, and Diehl Stiftung & Co. Inventors: Werner Bischoff-Bogon, and Friedrich Gebhard.
14. U.S. Patent No. 5,993,574, issued November 30, 1999, assigned to Brush Wellman, Inc. Inventors: John C. Harkness, and Shelley J. Wolf.
15. U.S. Patent No. 6,001,196, issued December 14, 1999, assigned to Brush Wellman, Inc. Inventors: John C. Harkness, and Shelley J. Wolf.
16. U.S. Patent No. 6,059,905, issued May 9, 2000, assigned to NGK Metals Corporation.
Inventors: Sam Friedman, Sherwood Goldstein, and Yoshio Ito.
17. U.S. Patent No. 6,093,499, issued July 25, 2000, assigned to Nippon Mining & Metals Co., Ltd. Inventor: Yasuo Tomioka.
18. U.S. Patent No. 6,136,104, issued October 24, 2000, assigned to Kobe Steel, Ltd.
Inventors: Motohisa Miyafuji, Hirofumi Arai, and Koya Nomura.
19. U.S. Patent No. 6,313,064, issued November 6, 2001, assigned to Kobe Steel Ltd.
Inventors: Motohisa Miyafuji, Yoshinobu Tsuzaki, Sadako Yamada, Takenori Nakayama, and Wataru Urushihara.
20. GB 352639, published July 16, 1931, assigned to Hirsch Kupfer Und Messingwerke.

21. JP 58013492A2, issued January 25, 1983, assigned to Yaskawa Electric Mfg. Co. Ltd.
Inventors: Hara Kenji, and Ikeda Mitsuaki.
22. JP 59047751A2, issued March 17, 1984, assigned to Nippon Mining Co. Ltd.
Inventors: Kawauchi Susumu, Tsuji Masahiro, and Yamamoto Michiharu.
23. JP 59159243A2, issued September 8, 1984, assigned to Hitachi Ltd. Inventor:
Kumagai Youzou.
24. JP 59229451A2, issued December 22, 1984, assigned to Mitsui Mining & Smelting
Co. Ltd. Inventors: Yamazaki Shuichi, Yamaguchi Hiroshi, and Taniguchi Yosuke.
25. KR 8701504, issued August 19, 1987, assigned to Mitsui Mining & Smelting Co, Ltd.
Inventors: Yamaguchi Hiroshi, and Yamasaki Shuichi.
26. JP 63130739, issued June 2, 1988, assigned to Nippon Mining Co. Ltd. Inventor: So
Hidehiko.
27. JP62120451, issued June 6, 1987, assigned to Nippon Mining Co. Ltd. Inventor: So
Hidehiko.
28. JP3087326, issued April 12, 1991, assigned to Nippon Mining Co. Ltd. Inventor: Toa
Tamio.
29. JP63062834, issued March 19, 1988, assigned to Nippon Mining Co. Ltd. Inventor:
So Hidehiko.
30. JP63262448, issued October 28, 1988, assigned to Nippon Mining Co. Ltd. Inventor:
So Hidehiko.
31. JP5059468, issued March 9, 1993, assigned to Nikko Kyodo Co. Ltd. Inventor: So

Hidehiko.

32. JP61250154, issued November 7, 1986, assigned to Nippon Mining Co. Ltd.
Inventor: So Hidehiko.
33. JP63241131, issued October 6, 1988, assigned to Nippon Mining Co. Ltd. Inventor:
So Hidehiko.
34. JP58124254, issued July 23, 1983, assigned to Nippon Kogyo KK. Inventor: Tsuji
Masahiro.
35. JP 5098372A2, issued April 20, 1993, assigned to Mikawa Tsuneaki and Okuhara
Masahiko. Inventor: Mikawa Tsuneaki.
36. JP 7258803, issued October 9, 1995, assigned to Nikko Kinzoku. Inventor:
Wakamatsu Motoki.
37. CN 1127305A, issued July 24, 1996, assigned to Beryllium Copper Alloy Factory.
Inventors: Mao Zhiqiang, Wen Guofu, and Duan Xiangnan.
38. JP 11279671A2, issued October 12, 1999, assigned to Japan Mikaroi. Inventor:
Mikawa Tsuneaki.
39. JP 11012051A2, issued January 19, 1999, assigned to Kyocera Corporation. Inventor:
Tanaka Atsushi.
40. Japanese Patent Application No. 59-197540, published September 11, 1984, assigned
to Sanpo Shindo Kogyo. Inventors: Ozaki Yasuaki, and Oishi Keiichiro.
41. Japanese Patent Application No. 60-009845, published January 18, 1985, assigned to
Takano Tetsuo. Inventor: Takano Tetsuo.

42. Japanese Patent Application No. 60-114542, published June 21, 1985, assigned to NGK Insulators Ltd. Inventors: Ikushima Kazutake, Ito Yoshio, and Ishihara Toshiaki.
43. Japanese Patent Application No. 02-179390, published July 12, 1990, assigned to GTE Prod. Corporation. Inventor: Mizuhara Howard.
44. Japanese Patent Application No. 03-053036, published March 7, 1991, assigned to Trefimetaux. Inventors: Christian Gandossi, Alain Picault, and Laurent Mineau.
45. Japanese Patent Application No. 09-025528, published January 28, 1997, assigned to Dowa Mining Co. Ltd. Inventors: Hatakeyama Koichi, Kanzaki Toshihiro, Endo Hideki, and Sugawara Akira.
46. Japanese Patent Application No. 11-050175, published February 23, 1999, assigned to Osaka Gokin Kogyosho. Inventors: Morimune Fumio, Saeki Shinji, and Taniguchi Hiroyasu.
47. Japanese Patent Application No. 2000-017356, published January 18, 2000, assigned to Kobe Steel Ltd. Inventors: Miyato Motohisa, Tsuzaki Yoshinobu, Yamada Sadako, Nakayama Takenori, and Urushibara Wataru.
48. Japanese Patent Application No. 2000-239763, published September 5, 2000, assigned to Sanbo Copper Alloy Co. Ltd. Inventor: Oishi Keiichiro.

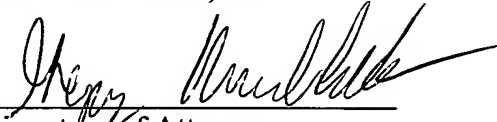
The undersigned represents that the closest art of which he is presently aware has been cited herein and understands that this statement shall not be construed as representation that no better art exists or that a thorough patentability search has been

made.

Date: October 15, 2003

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Respectfully submitted,
Ronald N. Caron, et al



Signature of Attorney
Gregory S. Rosenblatt
Reg. No. 32,489

\\10070\\111\\424993.1



INFORMATION DISCLOSURE

ATTY. DOCKET NO.

102350-200

SERIAL NO.

10/657005

APPLICANT:

OLIN CORPORATION/WIELAND-WERKE AG

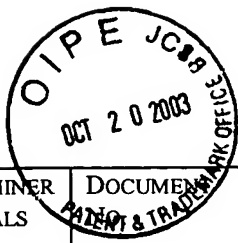
FILING DATE:

SEPTEMBER 5, 2003

GROUP:

U.S. PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT No.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPR.
	4,601,879	7/86	Durrschnabel, et al.			
	5,306,465	4/94	Caron, et al.			
	5,370,840	12/94	Caron, et al.			
	5,486,244	1/96	Caron, et al.			
	5,565,045	10/96	Caron, et al.			
	5,601,665	2/97	Caron, et al.			
	5,681,662	10/97	Chen, et al.			
	5,853,505	12/98	Brauer, et al.			
	5,766,377	6/98	Mueller, et al.			
	5,820,701	10/98	Bhargava			
	5,865,910	2/99	Bhargava			
	5,882,442	3/99	Caron, et al.			
	5,893,953	4/99	Bhargava			
	5,916,386	6/99	Bhargava			
	5,985,055	11/99	Bhargava			
	6,136,103	10/00	Boegel et al.			
	1,991,162	2/35	Kroll			
	3,201,234	8/65	Scherbner, et al.			
	4,362,579	12/82	Masahiro Tsuji			
	4,599,119	7/86	Ikushima, et al.			
	4,612,167	9/86	Watanabe, et al.			
	4,606,889	8/86	Goldstein, et al.			
	4,620,885	11/86	Igata, et al.			
	4,678,720	7/87	Hsu, et al.			



EXAMINER INITIALS	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPR.
	4,780,275	10/88	Grefkes, et al.			
	5,069,270	12/91	Gravemann et al.			
	5,215,711	6/93	Tsuneaki Mikawa			
	5,338,374	8/94	Marcus, et al.			
	5,968,604	10/99	Bischoff-Bogon, et al.			
	5,993,574	11/99	Harkness, et al.			
	6,001,196	12/99	Harkness, et al.			
	6,059,905	5/00	Friedman, et al.			
	6,093,499	7/00	Yasuo Tomioka			
	6,136,104	10/00	Miyafuji, et al.			
	6,313,064	11/01	Miyafuji et al.			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	DE4314625	3/94	Germany			
	2001-040440	2/01	Japan			
	EP10611146	12/00	Europe			
	GB352639	7/31	Great Britain			
	JP58013492	1/83	Japan			
	JP59047751	3/84	Japan			
	JP59159243	9/84	Japan			
	JP59229451	12/84	Japan			
	KR8701504	8/87	Korea			
	JP63130739	6/88	Japan			
	JP5098372	4/93	Japan			
	JP7258803	10/95	Japan			
	CN1127305	7/96	China			
	JP11279671	10/99	Japan			
	JP11012051	1/99	Japan			
	59-197540	9/84	Japan			



EXAMINER INITIALS	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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	60-009845	1/85	Japan				
	60-114542	6/85	Japan				
	02-179390	7/90	Japan				
	03-053036	3/91	Japan				
	09-025528	1/97	Japan				
	11-050175	2/99	Japan				
	2000-017356	1/00	Japan				
	2000-239763	9/00	Japan				
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	JP63062834	3/88	Japan				
	JP63262448	10/88	Japan				
	JP5059468	9/93	Japan				
	JP61250154	11/86	Japan				
	JP63241131	10/88	Japan				
	JP58124254	7/83	Japan				
OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)							
EXAMINER:				DATE CONSIDERED:			
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include c/opy of this form with next communication to applicant.							